

IN THE CLAIMS

1. (Currently Amended) A method of forming a preform for a muffler having a predetermined shape comprising the steps of:

texturizing glass strands by separating said glass strands into individual glass fibers prior to feeding said glass fibers into a preform mold;

feeding liquid powdered or granulated sugar and said glass fibers into said preform mold;

heating said preform mold to a temperature sufficient to at least partially caramelize said sugar, said caramelized sugar adhering to said glass fibers to form sugar-coated glass fibers; and

cooling said preform mold to bind said sugar-coated glass fibers together and form said preform, said caramelized sugar creating a stronger bond between said individual glass fibers than a bond formed by re-crystallization of melted sugar,

wherein said preform includes said sugar in an amount from about 2 to about 10% by weight of said preform.

2. (Original) The method of claim 1, wherein said glass fibers are continuous glass strands.

3. Canceled

4. (Currently Amended) The method of claim 2, wherein said continuous glass strands and said liquid sugar are simultaneously fed into said preform mold.

5. (Previously Presented) The method of claim 1, wherein said predetermined shape of said preform mold has a shape corresponding to a shape of an automobile muffler.

6. (Original) The method of claim 1, further comprising the step of:
removing said preform from said preform mold.

7. (Original) The method of claim 1, wherein said sugar is a sugar having a melting point of 130 °F or greater.

8. (Original) The method of claim 1, wherein said preform mold is perforated.

9. Canceled

10. (Original) The method of claim 8, wherein said cooling step comprises passing cool air through said preform mold.

11. (Currently Amended) A method of forming a preform comprising the steps of:
pre-heating a preform mold to a temperature above the melting point of a sugar to be applied thereto;

placing a molten sugar binder on internal walls of said pre-heated a-preform mold prior to feeding one or more continuous strands of glass fibers to said preform mold, said molten sugar remaining in a molten state on said internal walls of said pre-heated mold;

feeding said one or more continuous strands of glass fibers to said preform mold, said molten sugar adhering to said continuous strands of glass fibers; and

cooling melting said molten sugar binder to bond glass fibers positioned adjacent to said internal walls of said preform mold together and form said preform, said bonded glass fibers forming an encapsulating shell of glass fibers bonded by said sugar binder, said bonded glass fibers surrounding internal, unbonded glass fibers within said preform.

12. (Currently Amended) The method of claim 11, wherein said sugar has a melting point of 130 °F or greater.

13.-14. Canceled

15. (Previously Presented) The method of claim 11, further comprising the step of:
texturizing said one or more continuous strands of glass fibers by separating said one or more continuous strands of glass fibers into individual glass fibers prior to feeding said one or more continuous strands of glass fibers into said preform mold.

16. (Original) The method of claim 11, further comprising the step of: removing said preform from said preform mold.

17.-20. Canceled

21. (Currently Amended) A method of forming a preform for a muffler having a predetermined shape comprising the steps of:

pre-heating a preform mold to a temperature above the melting point of a sugar to be applied thereto;

placing a dissolved feeding powdered or granulated sugar on internal walls of said preform mold prior to feeding glass fibers to said preform mold, said heat from said preform mold removing water from said dissolved sugar and leaving said sugar adhered to said internal walls of said preform mold;

feeding said and glass fibers into said a-preform mold;

heating said preform mold to a temperature sufficient to melt at least partially caramelize said sugar, said melted caramelized sugar adhering to said glass fibers positioned adjacent to said internal walls of said preform mold to form sugar-coated glass fibers; and

cooling said preform mold to bond said glass fibers positioned adjacent to said internal walls of said preform mold together and form said preform, said bonded glass fibers forming an encapsulating shell of glass fibers bonded by said sugar binder, said bonded glass fibers surrounding internal, unbonded glass fibers within said preform to bind said sugar-coated glass fibers together and form said preform,

wherein said preform includes said sugar in an amount of approximately 2 – 10% by weight of said preform.

22. Canceled

23. (Previously Presented) The method of claim 21, wherein said sugar is a sugar having a melting point of 130 °F or greater.

24. (Previously Presented) The method of claim 21, wherein said glass fibers are continuous glass strands.

25.-26. Canceled

27. (New) The method of claim 11, wherein said cooling step comprises passing cool air through said preform mold.

28. (New) The method of claim 21, wherein said cooling step comprises passing cool air through said preform mold.

29. (New) The method of claim 11, wherein said sugar is selected from monosaccharides, disaccharides, polysaccharides and degradation products thereof.

30. (New) The method of claim 21, wherein said sugar is selected from monosaccharides, disaccharides, polysaccharides and degradation products thereof.

31. (New) The method of claim 1, wherein said sugar is a sugar syrup selected from corn syrup, high fructose corn syrup and molasses.